AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1 and 2. (Cancelled)

3. (Previously Presented) The filter of claim 8, wherein each of the upper layer region and the lower layer region comprises a plurality of layers.

4. (Previously Presented) The filter of claim 3, wherein a plurality of layers in the upper layer region comprises layers that include different materials, and a plurality of layers in the lower layer region comprises layers that include different materials.

5. (Previously Presented) The filter of claim 8, wherein at least one of the upper layer region and the lower layer region comprises an acoustic mirror, the acoustic mirror comprising at least two alternating layers having different acoustic impedances.

6. (Previously Presented) The filter of claim 5, wherein at least one layer of the acoustic mirror comprises an electrode layer.

7. (Currently Amended) The filter of claim 8 ~~2~~, ~~wherein the carrier substrate includes an air gap; and~~ wherein ~~at least one of the resonators is over the~~ there is an air gap between at least one of the resonators and the multilayer substrate.

8. (Currently Amended) A filter comprising resonators for use with bulk acoustic waves, each of the resonators comprising:

a lower layer region comprising a first electrode;

an upper layer region comprising a second electrode; and

a piezoelectric layer between the first electrode and the second electrode;

wherein two of the resonators are in ~~at least one of a lattice-type arrangement and~~ a stacked crystal filter arrangement, the two of the resonators comprising bulk acoustic wave resonators, each of the bulk acoustic wave resonators comprising:

piezoelectric layers between the first electrode and the second electrode; and

a third electrode among the piezoelectric layers;

wherein one of the resonators is connected to the stacked crystal filter arrangement so that a combination of the two resonators and the one resonator form an element of a lattice-type filter or a ladder-type filter, the one of the resonators comprising a bulk acoustic wave resonator or an inductive-capacitive (LC) resonator;

a capacitor in series or in parallel with ~~at least~~ one of the two resonators in the stacked crystal filter arrangement ~~or in series with at least one of the resonators~~, and

a multilayer substrate, wherein the capacitor is ~~and the at least one of the resonators are~~ integrated into the multilayer substrate, the capacitor comprising structured metal layers within the multilayer substrate.

9. (Currently Amended) The filter of claim 8, wherein ~~the capacitor is connected to only one of the resonators, the capacitor being connected in a circuit path that is in series with, or in parallel with,~~ the one of the resonators is an LC resonator.

10. (Previously Presented) A duplexer comprising a filter according to claim 8.

11. (Cancelled)

12. (Previously Presented) The electrical circuit of claim 15 ~~11~~, wherein an electrode of the second resonator is connected to ground.

13. (Cancelled)

14. (Previously Presented) The electrical circuit of claim 15 ~~11~~, wherein the second resonator comprises an LC resonator.

15. (Previously Presented) An electrical circuit comprising:

a substrate;

a stack of resonators;

an acoustic mirror between the substrate and the stack of resonators;

wherein the stack of resonators comprises:

first resonators that operate with bulk acoustic waves, the first resonators comprising an upper resonator and a lower resonator, the upper resonator and the lower resonator comprising upper and lower electrodes;

a second resonator comprising electrodes; and

a coupling layer between an upper electrode of the lower resonator and a lower electrode of the upper resonator;

wherein the upper electrode of the lower resonator and the lower electrode of the upper resonator are electrically connected to an electrode of the second resonator; and

a second stack of resonators, the second stack of resonators containing the second resonator.

16. (Cancelled)

17. (Previously Presented) The filter of claim 8, wherein, for at least one of the resonators, an upper layer region and a lower layer region comprises a plurality of layers.

18. (Previously Presented) The filter of claim 17, wherein a plurality of layers in each upper layer region comprises layers that include different materials, and a plurality of layers in each lower layer region comprises layers that include different materials.

19. (Previously Presented) The filter of claim 8, wherein each upper layer region and each lower layer region comprises an acoustic mirror, each acoustic mirror comprising at least two alternating layers having different acoustic impedances.

20. (Previously Presented) The filter of claim 19, wherein at least one layer of each acoustic mirror comprises an electrode layer.

21. (Currently Amended) The filter of claim 17 ~~16~~, ~~wherein the carrier substrate includes an air gap; and~~ wherein ~~at least one of the resonators is over the~~ there is an air gap between at least one of the resonators and the multilayer substrate.

22. (Previously Presented) A duplexer comprising a filter according to claim 9.

23. (Previously Presented) The electrical circuit of claim 15 ~~11~~, wherein the second resonator comprises a single resonator, the single resonator comprising a lower electrode, an upper electrode, and a piezoelectric layer between the upper electrode and the lower electrode.

24. (Previously Presented) The electrical circuit of claim 15, further comprising:

a capacitor in parallel with at least one of the resonators or in series with at least one of the resonators.

25. (Currently Amended) The electrical circuit of claim 24, wherein the substrate comprises a multilayer substrate, and wherein the capacitor ~~and at least one resonator~~ is integrated into the multilayer substrate, the capacitor comprising structured metal layers within the multilayer substrate.

26. (New) The filter of claim 8, wherein the one resonator comprises at least one passive inductive component and at least one passive capacitive component.